



Request for City Council Committee Action From the Department of Public Works

Date: November 17, 2003
To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee
Referral to: Honorable Barb Johnson, Chair Ways & Means Committee
Subject: **Cedar Lake Parkway Bridge, S.P 141-080-25**
Request an appropriation increase and Project extension date.

Recommendation:

1. Appropriation increase to the 2003 Capital Budget in the amount of \$450,000 for the Cedar Lake Parkway bridge project. The increase would be applied to the following Fund/Agy/Org: 4100-937-9386 (Bridge Capital).
2. Authorize appropriate City staff to decrease the 2003 general fund operating budget equal to the savings at year-end from the following Public Works agencies: 600 (Engineering Services), 607(Field Services), 650(Administration), 685(Traffic). The amount will be no greater than \$450,000.
3. Direct the Finance Department to amend the Mayor's 2004 budget recommendation to the Council to reflect a \$450,000 reduction in the planned 2004 net debt bond appropriation for street renovation by \$450,000, from \$3,650,000 to \$3,200,000. This revision to provide permanent funding for the 2003 appropriation increase to the Cedar Lake Parkway bridge project shall be taken up during final adoption of the 2004 Capital Budget Resolution on December 15, 2003.
4. Authorize the City Engineer to enter into a Supplemental Agreement with Lunda Construction Company for increased costs and extension of the contract completion date to September 30, 2004.

Previous Directives:

- Resolution 2000R-536 Increase the appropriation for the Capital Improvements in the Permanent Improvement Projects Fund 4100 937 9386 for \$3,000,000 in NDB and \$65,000 in Assessment Bonds (estimated). Adopted in the 2001-2005 Five Year Capital Program, as shown in the " Capital Section of the Adopted Budget book", and for 2001 fixing the maximum amount to be expended by the various funds under the Jurisdiction of the City Council, was passed December 14, 2000 by the City Council and approved December 18,2000 by the Mayor.
- Resolution 2001R-084 ordering the work to proceed and adopting the special assessments for the Cedar Lake Road South/Cedar Lake Parkway reconstruction project in the amount of \$53,010.98
- Resolution 2003R-026 Committee recommends that the proper City officers be authorized to increase an appropriation for the Cedar lake Parkway Bridge and Roadway Project in the amount of \$2,128,386, which is reimbursable from the following funds: Federal Fund \$1,662,000, State Bridge Bond \$381,686, Burlington Northern Santa Fe (BNSF) \$84,700. Committee recommends acceptance of the low bid received on OP #5993 (Petrn No 268534) submitted by Lunda Construction Company in the amount of \$3,571,609.15.

Prepared by: Meseret Wolana, Project Manager, 612-673-3527

Approved by:

Klara A. Fabry, P.E., City Engineer, Director of Public Works

Patrick P. Born, Director of Finance

Presenters: Don Elwood, P. E, Engineer III, Public Works

Financial Impact (Check those that apply)

☐ No financial impact - or - Action is within current department budget.
(If checked, go directly to Background/Supporting Information)

☒ Action requires an appropriation increase to the Capital Budget

☐ Action requires an appropriation increase to the Operating Budget

☐ Action provides increased revenue for appropriation increase

☐ Action requires use of contingency or reserves

☒ Other financial impact (Explain): Decrease to the 2003 general fund operating budget .

☒ Request provided to the Budget Office when provided to the Committee Coordinator

Background/Supporting Information:

The Cedar Lake Parkway Bridge and approach Roadways was programmed in the City Council approved 5-Year Capital Improvement Program for construction in 2003. This project has been approved for Federal Bridge Improvement Replacement (BIR) Funds for 2003.

The bid opening for this project was on December 18, 2002. The Department of Public Works accepted and recommended award of the contract to the low bidder Lunda Construction Company for \$3,571,609.15.

Construction of Cedar Lake Pkwy Bridge and approach Roadways project began on April 17, 2003. This project is being constructed under traffic by keeping a single lane with alternate traffic signal across the bridge. The Cedar Lake Trail is also open to pedestrians and bicyclists during construction.

Phase 1 construction of the project consists of the following project controlling activities: traffic control (detour), remove existing cantilever walkway, remove signals, construct west bridge, and construct storm structures.

In the process of phase 1 construction an additional \$35,000 of work was needed for the following change orders: tree removal, reinforcement bars, traffic control, ornamental railing, and relocating water stop box.

Excavation for the substructure and pile drive operation commenced in the middle of May 2003. The foundation piling depth was estimated at 60 feet. The test piles driven indicated in some cases up to 140 feet before obtaining design bearing capacity. The total cost increase due to piling overrun is estimated at \$244,720, of which \$121,370 will be recovered from the federal fund.

The geotechnical report gave no indication the piling depth required would be beyond 60 feet. The project team began to look for a solution for phase 2 construction and explored different options. The piling design options reviewed include changing the pile size, changing the pile type and using a pile driving analyzer. This device may provide more accurate data when a bearing capacity is achieved. None of these changes would guarantee the piles would decrease from 140 feet of the phase 1 construction. After reviewing these options, it is recommended to continue with the same size of pile accompanied with the use of a pile driving analyzer.

In June of 2003 the project team met with Lunda Construction Company and developed options to determine if the completion date of November 2003 was possible. The concrete overlay of the bridge would need to be placed by October 1, 2003, and in order to meet the concrete overlay deadline the existing bridge would need to be removed by the end of June 2003. The options reviewed included, accelerated schedule with over time, concrete overlay in 2004, immediate closure of the bridge, continue with regular schedule, heat and house operation. None of these options would guarantee the project would be substantially completed as scheduled on November 15, 2003.

Therefore, the revised schedule is recommended with two construction phases that would allow two way traffic during winter 2003-2004. The additional cost associated with this schedule change is \$162,306.

The neighborhood was informed with the schedule change during the neighborhood informational meeting held on July 15, 2003.

The total additional cost needed to complete this project \$450,000

Change orders	\$35,000
Piling overrun	\$123,350
Railroad Flagger	\$20,300
Schedule change (winter suspension, Mobilization, wage increase)	\$162,306
Engineering	\$109,044
Total	\$450,000

The original estimate is \$5,181,396

The Funding Sources and previous directives are as follows:

NDB (Net Debt Bonds)	\$3,000,000	Resolution 2000R-536
ASSB (Assessment Bonds)	\$ 65,000 (estimated)	Resolution 2000R-536
ASSB (Assessment Bonds)	\$ 53,010.98 (actual)	Resolution 2001R-084
Federal fund	\$ 1,662,000 (Maximum)	Resolution 2003R-026
State Bridge Bond	\$ 381,686 (Maximum)	Resolution 2003R-026
BNSF (Railroad)	\$ 84,700 (Maximum)	Resolution 2003R-026
NDB (Net Debt Bond) or General Fund	\$ 450,000	Resolution Pending
Total	\$5,631,396.98	

Additional Funding Request: \$450,000

To fund this project, it is our recommendation that any funds remaining in the 2003 Public Works General Fund appropriation at year-end be reallocated to cover this shortfall. However, we will not know how much money is available from the 2003 PW General Fund until early 2004. Our ability to have 2003 General Funds available will be highly dependant on the November and December snow season.

If less than \$450,000 is available from the 2003 Public Works General Fund at year-end, we recommend funding the difference from the 2004 street renovation capital program. In order to facilitate this finance option, it is necessary to increase the 2003 capital appropriation for the Cedar Lake Parkway Bridge project now and reduce the 2004 capital appropriation for street renovation by \$450,000. At the close of the 2003 books, we will return to your Committee to request reinstatement of 2003 capital funds designated for Cedar Lake Bridge in the amount of the 2003 PW - General Fund Savings to the 2004 Street Renovation program.

Attachment: Map

Cc: Council Member Lisa Goodman
Ward 7

Cedar Lake Parkway Bridge and Approach Roadway Construction

